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| APPLICATION NO. | FII | LING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------|------|------------|----------------------|-------------------------|------------------|
| 09/842,883 | 0 |)4/27/2001 | Benjamin Rovinski | 1038-1142 MIS:jb | 7578 |
| 24223 | 7590 | 09/29/2004 | | EXAMINER | |
| SIM & MC | | =' | NGUYEN, QUANG | | |
| 330 UNIVERSITY AVENUE 6TH FLOOR | | | | ART UNIT | PAPER NUMBER |
| TORONTO, ON M5G 1R7 | | | | 1636 | |
| CANADA | | | | DATE MAILED: 09/29/2004 | 18 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | |
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| • | 09/842,883 | ROVINSKI ET AL. | |
| Office Action Summary | Examiner | Art Unit | |
| | Quang Nguyen, Ph.D. | 1636 | |
| The MAILING DATE of this communication Period for Reply | appears on the cover sheet wi | th the correspondence address | |
| A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b). | N. R 1.136(a). In no event, however, may a re- reply within the statutory minimum of thirt riod will apply and will expire SIX (6) MON atute, cause the application to become AB | eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133). | |
| Status | | | |
| 1) Responsive to communication(s) filed on _ | · | | |
| | This action is non-final. | | |
| 3) Since this application is in condition for allow closed in accordance with the practice under the practice under the practice. | | | |
| Disposition of Claims | | | |
| 4) Claim(s) <u>1-31</u> is/are pending in the applicating 4a) Of the above claim(s) is/are without 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) <u>1-31</u> are subject to restriction and/ | drawn from consideration. | | |
| Application Papers | | • | |
| 9)☐ The specification is objected to by the Exam | iner. | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ a | accepted or b) objected to | y the Examiner. | |
| Applicant may not request that any objection to t | | | |
| Replacement drawing sheet(s) including the corn 11) The oath or declaration is objected to by the | | | |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the p application from the International Bure * See the attached detailed Office action for a line | ents have been received. ents have been received in A priority documents have been reau (PCT Rule 17.2(a)). | oplication No received in this National Stage | |
| Attachment(s) | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview S | ummary (PTO-413) | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date | |)/Mail Date formal Patent Application (PTO-152) | |

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DETAILED ACTION

Claims 1-31 are pending in the present application, and they are subjected to the following restrictions.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8 and 13-17, drawn to a method for generating in a host a virus neutralizing level of antibodies to a primary HIV isolate using a DNA molecule encoding an envelope glycoprotein of a primary isolate of HIV-1 and an attenuated viral vector expressing at least an envelope glycoprotein of a primary isolate of HIV-1, classified in class 514, subclass 44; class 424, subclass 93.2.
- II. Claims 1-2, 6-12 and 17 drawn to a method for generating in a host a virus neutralizing level of antibodies to a primary HIV isolate using a DNA molecule encoding an envelope glycoprotein of a primary isolate of HIV-1 and a non-infectious, non-replicating, immunogenic HIV-like particle having at least the envelope glycoprotein of a primary isolate of HIV-1, classified in class 514, subclass 44; class 424, subclass 93.2.
- III. Claims 18-26, drawn to a vector comprising a DNA sequence encoding an envelope glycoprotein of a primary isolate of HIV-1 under the control of a heterologous promoter for expression of the envelope glycoprotein in a host organism, classified in class 435, subclass 320.1.

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IV. Claims 27-31, drawn to a vector, comprising a modified HIV genome deficient in long terminal repeats and a heterologous promoter operatively connected to said genome for expression of said HIV genome in mammalian cells to produce non-infectious, non-replicating and immunogenic HIV-like particles, wherein at least the *env* gene is that from a primary isolate of HIV-1, classified in class 435, subclass 320.1.

The inventions are distinct, each from the other because of the following reasons:

The method of Group I is distinct from the method of Group II because they do not have the same starting materials, and therefore they do require different technical considerations for attaining the desired results. For example, the method of Group I requires an attenuated viral vector expressing at least an envelope glycoprotein of a primary isolate of HIV, whereas the method of Group II requires a non-infectious, non-replicating, immunogenic HIV-like particle having at least the envelope glycoprotein of a primary isolate of HIV-1.

Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the method of Group I can be practiced with a vector of Group IV.

Inventions I and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the

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process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the method of Group I can be practiced with a vector of Group III.

Inventions II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the method of Group II can be practiced with a vector of Group IV.

Inventions II and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the method of Group II can be practiced with a vector of Group III.

A vector of Group III is a distinct vector from the vector of Group IV in having different vector components. For example, compare the characteristics or components present in pCMV3Bx08 and vCP1579 shown in Figures 2 and 4 (Group III) with those of p133B1 shown in Figure 3 (Group IV).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and that

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the search required for each group is not required for the other groups because each group requires a different non-patent literature search due to each group comprising different vectors having different characteristics and/or components or method steps utilizing different vectors. Therefore, it would be unduly burdensome for the examiner to search and/or consider the patentability (examination) of all the inventions in a single application. Accordingly, restriction for examination purposes as indicated is proper.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not

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commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17 (h).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang Nguyen, Ph.D., whose telephone number is (571) 272-0776.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's mentor, David Guzo, Ph.D., may be reached at (571) 272-0767, or SPE, Irem Yucel, Ph.D., at (571) 272-0781.

To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1636; Central Fax No. (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Quang Nguyen, Ph.D.